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09/943,424	08/30/2001	Avi Kliger	TIA-001	7853
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Weiss & Arons, LLP 1540 Route 202 Suite B Pomona, NY 10970			EXAMINER NGUYEN, STEVEN H D	
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

### Application No.

09/943,424

### Applicant(s)

KLIGER ET AL.

### Examiner

Steven H.D Nguyen

### Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 71-95 is/are pending in the application.
- 4a) Of the above claim(s) 90-95 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 71-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 90-95 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: this claim is directed to a coax backbone that couples each of the plurality of network modules to the HRU, wherein when a transmitted signal of each module arrives at the HRU, the transmitted signal comprises the predefined input power level, and wherein the transmission power of each of the modules corresponds at least in part with a distance between the module and the HRU.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 90-95 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 71, 73-76, 78-82, 84-86 and 88-89 are rejected under 35 U.S.C. 102(e) as being anticipated by Petler (USP 6081519).

As claims 71, 73 and 82, Petler discloses a home network comprising a coax backbone (Fig 1, 210-230); a plurality of network modules (Fig 1, 140), each of said network modules being connected to the coax backbone; and a network master module (Fig 1, Ref 110) connected to the coax backbone, the master module that receives requests from the network modules over the coax backbone, the requests being for bandwidth to transmit bursts, the master module that establishes a transmission order of transmission opportunities for the network modules to follow when transmitting bursts and that transmits an allocation burst over the coax backbone that allocates a transmission opportunity to each of the modules to transmit bursts, said allocation burst being based on said transmission order (Col. 6, lines 7 to col. 7, line 45 and col. 9, lines 10 to col. 10, line 64, the BNU assigns the timeslots to the request devices which will transmits burst according the assigned time slots "transmission order").

As claims 74 and 84, Petler discloses in response to a predetermined burst transmitted by the master, the plurality of network modules are synchronized (Fig 7).

As claims 75 and 85, Petler discloses bandwidth allocated to each network module requesting a guaranteed quality of service (Col. 6, lines 8-24, CBR is required QOS).

As claims 76 and 86, Petler discloses a grant signal that indicates that a given network module can transmit a burst (Col. 6, lines 46-58).

As claim 78, Petler discloses changing the amount of allocated bandwidth (Col. 6, lines 7-23).

As claims 79 and 88, Petler discloses the master module is adapted to change the order of transmission opportunities (Col. 9, lines 10-25, the modules will transmit in a different order because each time BNU assigns a different one or more time slots to the modules).

As claim 80, Petler discloses using the master module to change the order of transmission opportunities and to change the amount of allocated bandwidth (Col. 9, lines 10-25 and Col. 6, lines 7-23).

As claims 81 and 89, Petler discloses a self-training burst that is adapted to be received by a network module involved in a registration process (Col. 10, lines 20-33).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 72, 77, 83 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petler.

As claims 72 and 83, Petler fails to disclose the parameters of a transmission opportunity for a selected network module depends at least in part on an amount of data ready for transmission at the selected network module in a selected transmission cycle. However, the examiner takes an official that a method and system for assigning at least one of time slot to the cable modem based on the amount data ready for transmission in a cycle is well known and expected in the art at the time of invention was made Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to assign the time slots to the modules based on amount data into the teaching of Petler. The motivation would have been to reduce congestion.

As claims 77 and 87, Petler fails to disclose comprising an empty burst associated with a selected network module that has communicated that the selected network module includes no data to transmit. However, the examiner takes an official notice that a method and system for transmitting a null packet when it has no data to transmit is well-known and expected in the art at the time of invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply these methods into Petler's method and system. The motivation would have been to synchronize with the network.

6. Claims 71-89 rejected under 35 U.S.C. 103(a) as being unpatentable over Bushmitch (USP 6950399).

As claims 71, 73 and 82, Bushmitch discloses a network comprising a coax backbone (Fig 1); a plurality of network modules (Fig 1, CM), each of said network modules being connected to the coax backbone; and a network master module (Fig 1, CMTS) connected to the coax backbone, the master module that receives requests from the network modules over the coax backbone, the requests being for bandwidth to transmit bursts, the master module that establishes a transmission order of transmission opportunities for the network modules to follow when transmitting bursts and that transmits an allocation burst over the coax backbone that allocates a transmission opportunity to each of the modules to transmit bursts, said allocation burst being based on said transmission order (Fig 2, CMs request bandwidth and CMTS assigns these requests by generating a grant burst such as MAP to transmit to the CMs wherein the CMs are transmitting data to CMTS according to the order of MAP). Bushmitch fails to disclose a home/residence/house. However, a home network is not given a weight because it is only just intention to use the method and system of Bushmitch in Home. Therefore, it would have been

obvious to one of ordinary skill in the art at the time of the invention was made to apply these method and system into a home network. The motivation would have been to establish a private network for customer.

As claims 74 and 84, Bushmitch discloses in response to a predetermined burst transmitted by the master, the plurality of network modules are synchronized (Col. 4, lines 20-30).

As claims 75 and 85, Bushmitch discloses bandwidth allocated to each network module requesting a guaranteed quality of service (Col. 3, lines 16-30).

As claims 76 and 86, Bushmitch discloses a grant signal that indicates that a given network module can transmit a burst (Fig 4, MM).

As claim 78, Bushmitch discloses changing the amount of allocated bandwidth (Col. 1, line 45 to col. 2, line 35).

As claims 79 and 88, Bushmitch discloses the master module is adapted to change the order of transmission opportunities (Fig 4, MM).

As claims 81 and 89, Bushmitch discloses a self-training burst that is adapted to be received by a network module involved in a registration process (Col. 4, lines 3-18).

As claim 80, Bushmitch discloses using the master module to change the order of transmission opportunities and to change the amount of allocated bandwidth (Col. 1, line 45 to col. 2, line 35 and Fig 4, MM).

As claims 72 and 83, Bushmitch fails to disclose the parameters of a transmission opportunity for a selected network module depends at least in part on an amount of data ready for transmission at the selected network module in a selected transmission cycle. However, the

examiner takes an official that a method and system for assigning at least one of time slot to the cable modem based on the amount data ready for transmission in a cycle is well known and expected in the art at the time of invention was made Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to assign the time slots to the modules based on amount data into the teaching of Bushmitch. The motivation would have been to reduce congestion.

As claims 77 and 87, Bushmitch fails to disclose comprising an empty burst associated with a selected network module that has communicated that the selected network module includes no data to transmit. However, the examiner takes an official notice that a method and system for transmitting a null packet when it has no data to transmit is well-know and expected in the art at the time of invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply these methods into Bushmitch's method and system. The motivation would have been to synchronize with the network.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Quigley (USP 6650624) discloses a master for assigning the time slots to the slaves by using MAP message for quality, registering the slaves, sending a sync message to sync with the slaves and training.



Barnath (USP 6526070) discloses a master for assigning the time slots to the slaves by using MAP message for quality, registering the slaves, sending a sync message to sync with the slaves and training.

Vogel (USP 6895437) discloses a master for assigning the time slots to the slaves by using MAP message for quality, registering the slaves, sending a sync message to sync with the slaves and training.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven H.D Nguyen whose telephone number is (571) 272-3159. The examiner can normally be reached on 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Steven H.D Nguyen  
Primary Examiner  
Art Unit 2619